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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/171,960	10/29/1998	ROBERT D SPINDLEY	36-1287	8693

7590 04/05/2002

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EXAMINER

FERRIS, DERRICK W

ART UNIT PAPER NUMBER

2663

DATE MAILED: 04/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/171,960

Applicant(s)

SPINDLEY ET AL.

Examiner

Derrick W. Ferris

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/GB98/02808, filed on 16 September 1998.

Drawings

2. Attached in form PTO-948 find the draftsman's objections to the drawings filed on 10/29/1998.

Specification

3. The disclosure is objected to because of the following informalities: the reference character for firmware (93) is not shown in Figure 9 as described on page 9, line 26.

Appropriate correction is required.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

It is recommended by the examiner to use the following descriptive title: "Mediation of a Control Signaling Method in a Telecommunications Network".

Claim Rejections - 35 USC § 112

5. **Claims 18-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-10 and 12-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,550,914 to Clarke et al. in further view of WO 95/35633 to Weisser.

As to **claims 1, 2, 8, 13, 14, 15 and 18**, figure 4 of Clarke et al. shows an operating node (52) (i.e., message interceptor) connected to a single external source (48 or 49) (i.e., signaling transfer point). The operating node (52) receives messages called “signaling units” (40) as shown in Figure 3 that contain a control field and can be handled according to the value(s) in the control field [column 6, lines 30-67; column 7, lines 1-17]. As shown in Figure 5, the message unit (MSU) (52) contains a protocol engine (64,65) for Level 2 protocols (i.e., lower-level of a messaging protocol) and a respective data extraction circuit (66,67) for extracting Level 3 information from each MSU (or “signaling unit”) received at the interface (60). It is noted that each message interceptor may either act as a message suppression action or a message modification action [column 7, lines 47-49] where it is possible to modify different portions of the MSU (or “signaling unit”) including control fields [column 10, lines 35-59]. Thus it may also be implied that subsequently processing the signal in the network may (or could) be dependent on the control field being overwritten or modified. Not clearly taught by the reference is a method for communicating between two separate networks where one network is an

external network, although the background of Clarke et al. suggests a motive for using the operating node (52) to communicate between two related but separate network infrastructures [column 1, lines 19-21]. Thus it is determined by the examiner that it would have also been obvious to apply this solution towards an external network due to the above reason. Furthermore, in a separate application that also provides mediation between two control signaling networks, Weisser discusses in the abstract a method of mediation of data packet traffic across a particular interface between the Advanced Intelligent Network (AIN) (i.e., communications network) operated by a local exchange carrier and a non-local exchange carrier service provider (i.e., signal source external to the communications network). The Weisser reference also points out similar anticipations to the elements described above. Since these two references attempt to solve the same problem of control protocol mediation, it would have also been obvious to combine these references so that an external network (as taught by Weisser) is used in lieu of a separate network that may or may not be external.

As to **claims 3, 9 and 16**, Clarke et al. teaches a protocol engine (62, 63) that acts generally in the same manner as a standard Level 2 protocol engines for the message transfer point (MTP) [column 7, lines 64-69]. It is also pointed out that the operation of the link portion (62) is maintained at link level (MTP Level 2) by the protocol engine [column 8, lines 23-30] when Level 3 information (i.e., network layer functions) is extracted.

As to **claim 4 and 10**, figure 3 of Clarke et al. shows a routing field (43) used for routing the MSU. Although Clarke et al. does not discuss inserting a predetermined destination

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point code (14) into the MSU it would have been obvious given the reference to modify a predetermined destination point code (14) using a predetermined address since the reference allows routing information to be changed within the MSU using the modification circuit (79) [column 10, lines 35-58].

As to **claims 5, 6, 7 and 12**, the routing of signals in the reference could be of type SS7 (a common channel signaling protocol) over a point-to-point connection as shown in Figure 4 [column 4, lines 54-60].

As to **claim 18**, in addition to the 112 rejection, it is noted by the examiner that Clarke et al. teaches a basic form of policing using the selective action control circuit and that certain actions can be taken [column 7, lines 31-36] including changing the routing label (43) [column 7, lines 5-18] which includes the SLS, OPC, SIO, and DPC (referring to figure 4 of application and figure 3 of Clarke et al.).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,664,102 discusses a mediation access processor (i.e., operation node) that can be used to map different network protocols.

U.S. Patent No. 5,953,404 provides a similar method for mediating between SS7 protocols in a separate network as well as providing basic quality of service.

U.S. Patent No. 5,680,552 provides a general gateway for connecting two separate networks where SS7 is not specifically mentioned.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225.

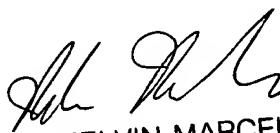
The examiner can normally be reached on M-F 9 A.M. - 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

Derrick W. Ferris
Examiner
Art Unit 2663

DWF
April 2, 2002


MELVIN MARCELO
PRIMARY EXAMINER